

We Claim:

1. An apparatus for estimating a manufacturing cost for a product comprising:  
an input device for receiving input data concerning physical characteristics of a product to be manufactured;  
a cost calculation processor for calculating a manufacturing cost based on information inputted from said input device and cost factor data, supplied from an external source; and  
a display device for displaying a calculated manufacturing cost from said cost calculation processor, wherein said cost calculation processor calculates a plurality of alternative manufacturing costs, with each alternative manufacturing cost being associated with a respective one of a plurality alternative process series for manufacturing the product, when a plurality of process series are entered via said input device; and wherein said display device displays the plurality calculated manufacturing costs for the plurality of process series.
2. The apparatus according to claim 1, wherein said cost calculation processor is arranged to calculate manufacturing costs for individual process steps of the plurality of process series; and wherein said display device displays the calculated manufacturing costs for the individual process steps.
3. The apparatus according to claim 2, wherein said physical characteristics include at least one of a shape, a thickness, and a material composition of the product to be manufactured.

09291367 "052701

4. The apparatus according to claim 3, wherein said external source comprises:  
a variable cost memory; and  
a fixed cost memory.
5. The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an in-house net connection.
6. The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an internet connection.
7. The apparatus according to claim 4, wherein said input device is located in an in-house development department.
8. The apparatus according to claim 7, wherein said external source receives data from in-house production facilities and outsourced component makers.
9. The apparatus according to claim 8, wherein said in-house production facilities are connected to said external source via an in-house net connection, and wherein said outsourced component makers are connected to said external source via an internet connection.

10. The apparatus according to claim 1, wherein said physical characteristics include at least one of a shape, a thickness, and a material composition of the product to be manufactured.

11. The apparatus according to claim 1, wherein said external source comprises:  
a variable cost memory; and  
a fixed cost memory.

12. The apparatus according to claim 11, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an in-house net connection.

13. The apparatus according to claim 11, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an internet connection.

14. The apparatus according to claim 1, wherein said input device is located in an in-house development department.

15. The apparatus according to claim 1, wherein said external source receives data from in-house production facilities and outsourced component makers.

16. The apparatus according to claim 15, wherein said in-house production facilities are connected to said external source via an in-house net connection, and wherein said

09891357-062704  
10/29/2009 4:56:00 PM

outsourced component makers are connected to said external source via an internet connection.

17. A method of estimating a manufacturing cost for a product, said method comprising the steps of:

entering physical characteristics data concerning the product to be made;

storing the characteristics data in a first memory;

accessing a second memory storing cost factors provided by a plurality of producers;

calculating estimated costs for manufacturing the product relative to the plurality of the producers; and

displaying the estimated costs for the plurality of producers.

18. The method according to claim 17, further comprising the step of:

updating the cost factors stored in the second memory by the plurality of producers.

19. The method according to claim 17, wherein said calculating step further includes figuring manufacturing costs for individual process steps of each of the plurality of producers; and wherein said displaying step further includes revealing the calculated manufacturing costs for the individual process steps.

20. The method according to claim 17, wherein said accessing step takes place via an internet connection.

09891367.052701